

ABSTRACT OF THE INVENTION

5 The present invention is a method and system for
updating location information of mobile stations. A mobile
station moves from an area controlled by a first mobile
services switching center (MSC) to an area controlled by a
second MSC. The mobile station then registers with the
second MSC, and, in response, the mobile station is added to
a second MSC database. The second MSC recalculates a second
MSC checksum to include the newly registered mobile station.
10 Next, the HLR sends an HLR checksum to the second MSC. The
second MSC compares the HLR checksum and the second MSC
checksum. If the checksums are equal, then the second MSC
sends the location registration signal to the mobile
station. If the checksums are unequal, then the second MSC
15 sends an error signal to the HLR, and also sets the second
MSC database equal to a previous correct database. Next,
the HLR sends all logged erasures to the second MSC. The
second MSC then appropriately subtracts and adds each erased
and newly registered mobile station to the database of the
20 second MSC and recalculates the second MSC checksum until
both checksums are equal.